Nitrogen fertilization on seedless grapes at the São Francisco river valley on 2001 harvest seasons

Davi José Silva, Patrícia Coelho de Souza Leão, Emanuel Elder Gomes da Silva
Embrapa Semi-Árido, CP 23, CEP 56302-970, Petrolina-PE, Brazil, davi@cpatsa.embrapa.br

Aiming to determine the appropriate level of nitrogen, applied through fertirrigation, that provides a satisfactory plant development, better quality of the fruit and higher yields, an experiment was carried out in Petrolina-PE, in the semi-arid of Brazilian Northeast. The main treatments consisted of five seedless table grape varieties (Perlette, Thompson Seedless, Marroo Seedless, Catalunha and Superior Seedless), and the secondary treatments were four nitrogen levels (0, 75, 150 and 300 kg ha^{-1} N). The experiment was disposed in a split plot design in random blocks. Nitrogen was applied through microsprinkler. Two harvest seasons in 2001 were evaluated (first and second semester). The variety 'Marroo Seedless' presented the highest yield in both yield cycles. 'Perlette' and 'Superior Seedless' also had good production. The N level 75 kg ha^{-1} promoted the highest yields for Marroo Seedless, Perlette and Superior Seedless varieties being respectively 26.4, 12.5 and 10.6 t ha^{-1}. The number of bunches per plant shows a direct relation for applied N levels and the yield. There was not significant effect of N levels on the other bunches characteristics evaluated.